



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,818	11/29/2001	Eiji Furukawa	122.1476	9741

21171 7590 10/30/2006
STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

LAVIN, CHRISTOPHER L

ART UNIT	PAPER NUMBER
----------	--------------

2624

DATE MAILED: 10/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/995,818

Applicant(s)

FURUKAWA ET AL.

Examiner

Christopher L. Lavin

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11, 12 and 14-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11, 12 and 14-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This action is in response to the amendment filed on 09/08/06.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The two newly added sections of claim 14, the judging means and drawing means, make little or no sense. Based on the specification and in particular figure 34, the examiner is surmising that the applicant is trying to claim the idea of displaying all the symbols from one level of abstraction that make up a single symbol at a higher level of abstraction.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6, 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Miura et al (5,847,968).

In regards to claim 1, Mirua discloses A logic drawing entry apparatus for processing a plurality of drawing sheets for computer aided design of logic circuits, each of said plurality of drawing sheets indicating a logic circuit having at least one symbol, comprising:

a means for creating an inter-drawing diagram file which describes respective positions of said plurality of drawing sheets on one screen and attributes of said plurality of drawing sheets (Figure 5 discloses the design information stored for each circuit. That information includes all information called for in the inter-drawing diagram file.); and

inter-drawing indication means for indicating, on said screen, said plurality of drawing sheets according to the description in said inter-drawing diagram file by miniaturizing the size of each of said plurality of drawing sheets (figure 8), and

net drawing means for drawing nets among said plurality of drawing sheets miniaturized and indicated on said screen, said nets indicating connection relations among a plurality of drawing sheets (Figure 5C).

In regards to claims 2 – 6 and 15, these claims are rejected for the same reasons as presented in the last office action dated 06/08/06.

In regards to claim 16, claim 16 is rejected for the same reasons as claim 1. The argument analogous to that presented above for claim 1 is applicable to claim 16.

5. Claims 9, 11, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Agrawal (5,218,551).

In regards to claim 9, A logic drawing entry apparatus for processing a drawing sheet indicating a logic circuit which has a plurality of symbols and nets connecting among said symbols, logic drawing entry apparatus comprising:

Symbol selecting means for selecting a symbol to be moved and a position to which the selected symbol moves (col. 5, lines 44 – 63: The Global Placement means provides symbol selection means, as symbols are selected by the Global Placement means and moved. This requirement, as currently written does not require user selection, it can be automated as called for in Agrawal.);

Judging means for judging whether or not a symbol exists at said position selected (In order to move the symbol the system must know if the symbol will be placed where a current symbol exists, this is also implied in col. 17, lines 55 – 68 when it is stated that another symbol is chosen to be swapped with the first symbol.);

Symbol moving means for moving said selected symbols to said position if there is no symbol at said selected position (Figure 7, number 718 and Figure 10);

Symbol swapping means for swapping said selected symbol for a symbol at said selected position if there is a symbol at said selected position, so that positions of said selected symbol and said symbol at said selected position are swapped each other (Figure 7, number 718 and Figure 10); and

Net redrawing means for redrawing nets for said selected symbols after the movement or swap while keeping the connection relations between said selected symbols before the movement (Figure 1, number 800 and Figure 10).

In regards to claims 11 and 12, these claims are rejected for the same reasons as presented in the last office action dated 06/08/06.

6. Claim 14 is rejected under 35 U.S.C. 102(e) as being anticipated by Otaguro (6,966,045).

Otaguro teaches (figure 15) that a high level of abstraction (r1 and r2) can be displayed as the components (c11, c12, c13, c21, c22, c23, and c24) that make up these symbols. Otaguro also clearly discloses the concept of a net drawing means in figure 16, item 27.

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miura and Merchant (6,490,712), please see the last office action dated 06/08/06 for the rejections.

Response to Arguments

9. Applicant's arguments filed 09/08/06 with regards to claims 1 – 8, 14, and 15 have been fully considered but they are not persuasive.

10. Applicant's arguments with respect to claims 9, 11, and 12 have been considered but are moot in view of the new ground(s) of rejection.

11. The applicant first argues that Miura does not disclose miniaturization by pointing to colum 14, lines 34 – 45 of Miura. First the examiner would like to point out that the final line quoted by the applicant is actually from a new paragraph. Second the line

Art Unit: 2624

"Actual size proportion of them all is represented accurately by the design information in storage device 1." Is stating that a "miniature" of the symbol be placed on the board which is proportional correct in comparison to the board size represented on the screen. So just like a model is "proportionally" correct to the item it is designed to represent, the symbol is proportionally correct. Thus the symbol is a miniature.

12. The applicant next argues that Miura does not show miniaturized drawing sheets connected by nets. Again this is incorrect. Miura is showing the miniaturized symbols connected by dark lines that are suppose to represent nets according to Miura.

13. In regards to claim 2, Miura discloses the ability to edit. The applicant does not define the term "works", and therefore must be interpreted broadly.

14. In regards to claim 3, Miura clearly allows for the movement of symbols.

15. In regards to claim 4, the applicant in the specification does not define the term attributes and therefore the applicant is entitled to a broad interpretation of the language. Even moving a wire around would therefore meet this requirement.

16. In regards to claims 5 and 6, the term connections is not defined by the specification and therefore the term will be interpreted broadly. Although the connections in figure 5D are not the number of times two symbols are connected they are counts of connections between symbols.

17. In regards to claim 15, again the language is broad and can be interrupted to simply require a block representation, which is what is shown in figure 47A.

Suggestions

18. The examiner would like to make a few suggestions. First and foremost, if the applicant were to clearly define the terms in the claims, many of the claims would at least overcome the current art. For example the term "works" in claim 2, or "attributes" in claim 4. The specification does not provide definitive definitions for most of the key words used in the claims. Defining these words in the claims would make it much harder to apply the current art to the claims. Second the examiner would suggest that the applicant focus on what the specification says is the inventive features, see specification paragraphs 4 – 6.

Conclusion

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

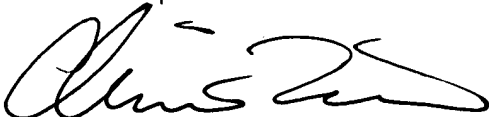
Art Unit: 2624

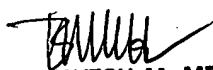
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher L. Lavin whose telephone number is 571-272-7392. The examiner can normally be reached on M - F (8:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh M. Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher Lavin




BHAVESH M. MEHTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600